## WE CLAIM:

1. An hydrophobic GRF analog of formula A:

X ----GRF-peptide

(A)/

wherein;

the GRF peptide is a peptide of formula B;

A1-A2-Asp-Ala-Ile-Phe-Thr-A8-Ser-Tyr-Arg-Lys-A13-Leu-A15-Gln-Leu-A18-Ala-Arg-Lys-Leu-Leu-A24-A25-Ile-A27-A28-Arg-

 $A30-R_0$  (B)

wherein,

A1 is Tyr or His;

A2 is Val or Ala;

A8 is Asn or Ser;

A13 is Val or Ile;

A15 is Ala or Gly;

A18 is Ser or Tyr;

A24 is Gln or His;

A25 is Asp or Glu;

A27 is Met, Ile or Nle

A28 is Ser or Asn;

A30 is a bond or any amino acid sequence of 1 up to 15 residues;

Ro is NH2 or NH-(CH2)n-CONH2, with n=1 to 12 and;

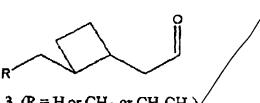
X is selected from the group consisting of:

R = H or CH<sub>3</sub> or CH<sub>2</sub>CH<sub>3</sub>)

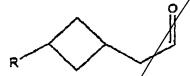
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R = H or CH<sub>3</sub> or CH<sub>2</sub>CH<sub>3</sub>)

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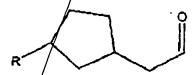
3 ( $R = H \text{ or } CH_3 \text{ or } CH_2CH_3$ )



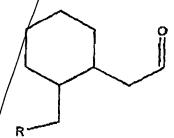
4 (R = H or CH<sub>3</sub> of CH<sub>2</sub>CH<sub>3</sub>)



5 ( $R = H/or CH_3 or CH_2CH_3$ )

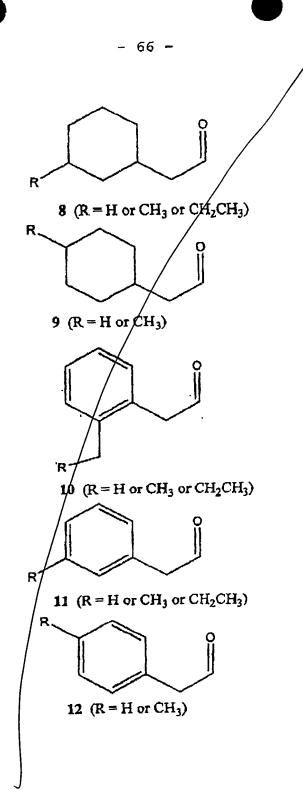


 $6/(R = H \text{ or } CH_3 \text{ or } CH_2CH_3)$ 

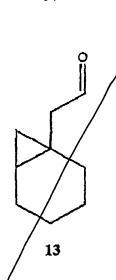


7 (R = H or  $CH_3$  or  $CH_2CH_3$ )

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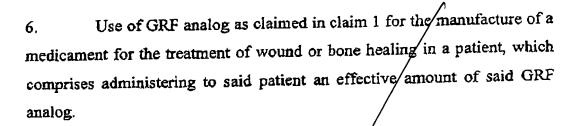






- 2. A pharmaceutical formulation for inducing growth hormone release which comprises as an active ingredient a GRF analog as claimed in claim 1, in association with a pharmaceutically acceptable carrier, excipient or diluent.
- 3. Use of GRF analog as claimed in claim 1 for the manufacture of a medicament for increasing the level of growth hormone in a patient which comprises administering to said patient an effective amount of said GRF analog.
- 4. A method for the diagnosis of growth hormone deficiencies in patients, which comprises administering to said patient a GRF analog as claimed in claim 1 and measuring the growth hormone response.
- 5. Use of GRF analog as claimed in claim 1 for the manufacture of a medicament for the treatment of pituitary dwarfism or growth retardation in a patient, which comprises administering to said patient an effective amount of said GRF analog.

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- Use of GRF analog as claimed in claim 1 for the manufacture of a 7. medicament for the treatment of osteoporosis in a patient, which comprises administering to said patient an effective amount of said GRF analog.
- Use of GRF analog as claimed in claim 1 for the manufacture of a 8. medicament for improving protein anabolism in human or animal, which comprises administering to said human or animal an effective amount of said GRF analog.
- Use of GRF analog as claimed in claim 1 for the manufacture of a 9. medicament for inducing a lipolytic effect in human or animal inflicted with clinical obesity, which comprises administering to said human or animal an effective amount of said/GRF analog.
- Use of GRF analog as claimed in claim 1 for the manufacture of a 10. medicament for the overall upgrading of somatroph function in human or animal, which comprises administering to said human or animal an effective amount of said GRF analog.